



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,570	07/23/2001	David Kenneth Blanchard	52646-00306USPT	6110

26231 7590 12/15/2004

FISH & RICHARDSON P.C.  
5000 BANK ONE CENTER  
1717 MAIN STREET  
DALLAS, TX 75201

EXAMINER
----------

SHAPIRO, JEFFERY A

ART UNIT	PAPER NUMBER
----------	--------------

3653

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/911,570

Applicant(s)

BLANCHARD, DAVID KENNETH

Examiner

Jeffrey A. Shapiro

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-56 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolls (US 6,643,623 B1) in view of Meier. Kolls discloses Applicant's claimed system as follows.

As described in Claims 1, 14, 17, 33 and 47;

- a. an in-store controller (614) for processing at least one message relating to a retail refueling environment (see col. 25, lines 17-31) as well as fig 3H and Kolls' Claim 1);
- b. a server module (632), connected to the in-store controller, comprising at least one of a transmitter and a receiver (558);
- c. at least one client module (630B) comprising at least one of a transmitter and a receiver (606A and B);
- d. at least one service device (628) or peripheral device (646), connected to the at least one client module, for processing the at least one message (see col. 18, lines 4-16);
- e. a wireless communication link for communicating the at least one message between the at least one of a transmitter and a receiver in the

server module and the at least one of a transmitter and a receiver in the at least one client module (note again, for example, transceivers (606A and B));

Kolls does not expressly disclose, but Meier discloses the use of a first wireless link (13, 15 or 17) and a second wireless link (19) to handle transmission of a message between components of the computer system.

Both Kolls and Meier are analogous art because Kolls refers to the use of wireless systems as an alternative to other hardwired systems, and Meier concerns use of a wireless RF network.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used a wireless RF network having various base stations (19 or 21), which act as a second wireless link with a first wireless link, such as wireless terminals (13, 15 or 17), so as to communicate data and messages through the system. See figures 1, 9 or 10, for example.

The suggestion/motivation would have been to ensure proper network coverage of an area without adding extra cable or wire. See Meier, col. 33, lines 10-33 and col. 34, lines 1-27.

Note also that Kolls discloses using wireless systems as an alternative to hardwired systems. See, for example, Kolls, col. 13, lines 45-67 and col. 14, lines 1-6, col. 16, lines 13-35, col. 18, lines 4-16 and 29-48 and col. 19, lines 1-7, for example.

Kolls further discloses the following.

As described in Claims 2 and 18;

- f. the processing further comprises generating the at least one message (see col. 18, lines 4-16);

As described in Claims 3 and 19;

- g. the processing further comprises extracting the at least one message (see col. 18, lines 4-16);

As described in Claims 4, 20 and 34;

- h. a serial interface for connecting the in-store controller to the server module (see col. 13, lines 45-47);

As described in Claims 5, 21 and 35;

- i. a serial interface for connecting each of the at least one client module to a corresponding one of the at least one service device (see col. 13, lines 45-47);

As described in Claim 7;

- j. the service device comprises a tank gauge monitor (see col. 4, lines 23-26, noting that tank level monitoring is a maintenance function necessary for the operation of the dispensing of the product of the gas dispenser);

As described in Claim 9;

- k. the at least one service device comprises a leak detection system (see col. 4, lines 23-26, noting that leak detection monitoring is a

maintenance function necessary for the operation of the dispensing of the product of the gas dispenser);

As described in Claim 10;

l. the at least one message comprises leak detection information (see col. 4, lines 23-26, noting that leak detection monitoring is a maintenance function necessary for the operation of the dispensing of the product of the gas dispenser);

As described in Claim 11;

m. the at least one message comprises customer transaction information (see fig. 13, elements (1110 and 1112));

As described in Claims 12, 22, 37 and 48;

n. the at least one message is formatted according to a protocol link layer for transmission of at least one data packet, the at least one data packet comprising wired connection protocol information for a retail refueling environment (see col. 18, lines 4-16 and lines 29-48, noting that this is how TCP/IP necessarily works);

As described in Claim 13;

o. the at least one service device comprises at least one of a car wash controller, a satellite digital interface unit (see abstract), and a price board controller;

As described in Claim 14;

- p. an indoor payment terminal (638, for example) for processing at least one message relating to a retail fueling environment;

As described in Claims 15 and 40;

- q. the at least one peripheral device comprises at least one of a customer display (500), a pin-pad, a journal printer, a receipt printer, a keyboard, an input mouse, a touchscreen, a barcode scanner, a cash drawer, a check approval interface, a surveillance camera, and a money order machine (see figure 6a);
- r. the peripheral device is at least one of a smartcard reader (638) and an automated refueling robot controller;

As described in Claims 24, 25 or 38;

- s. the POS network controller (614 or 630) or dispenser controller (640) or forecourt controller device comprises a customer access terminal (CAT) network controller (650);

As described in Claims 26 and 39;

- t. at least one user interface device (182) communicating with the CAT controller board via a wireless interface;

As described in Claim 27;

- u. the POS network controller comprises a pump network controller (again, see figure 3H) ;

As described in Claims 28 and 41;

Art Unit: 3653

- v. the forecourt controller device comprises a pump controller (see figure 3H);

As described in Claims 29 and 42;

- w. at least one fuel dispensing component communicating with the pump computer via a wireless interface (see abstract and figure 3H);

As described in Claims 31 and 44;

- x. a dispenser control board (DCB) (640);

3. Claims 6, 8, 16, 23, 30, 32, 36, 43, 45, 46 and 49-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolls in view of Meier and further in view of Dickson (US 6,574,603 B1). Kolls discloses the system described above. Kolls further discloses the following.

As described in Claim 49;

- y. the at least one message is further formatted to include a source address field identifying the address of a transmitter module that performs the step of transmitting (note that this is what TCP/IP protocol is, as mentioned throughout Kolls, specifically at col. 18, lines 4-49);

As described in Claim 50;

- z. the at least one message is further formatted to include a destination address field identifying the address of a receiver module that performs the step of receiving (see col. 18, lines 4-49);



As described in Claim 51;

aa. the at least one message is further formatted to include a message command field, the message command field indicating at least one of an attachment of a data packet, an acknowledgement/non-acknowledgement response, an in-range inquiry, and an in-range response (see col. 18, lines 4-49);

As described in Claim 52;

ab. the at least one message is further formatted to include at least one of a message sequence number field, and a message length field indicating a total length of the at least one message (col. 18, lines 4-49);

As described in Claim 53;

ac. the at least one message is further formatted to include at least one of a start-of-text field, an end of text field, and a cyclical redundancy field check (note that this would be expedient for one ordinarily skilled in the art to include in an email system, which handles text message creation and communication);

As described in Claim 54;

ad. the at least one data packet comprises customer transaction information (col. 18, lines 4-49);

As described in Claim 55;

ae. the at least one data packet comprises a pump control information (col. 18, lines 4-49);

As described in Claim 56;

af. the at least one data packet comprises a customer identification information (col. 18, lines 4-49);

Finley et al does not expressly disclose, but Dickenson et al discloses the following.

As described in Claim 8;

ag. the at least one message comprises refueling tank level information (see Dickson et al, US 6,574,603 B1), col. 11, lines 44-50;

As described in Claims 6, 16, 23 and 36;

ah. wherein the wireless communication link (see figure 4D and Claim 1 of Dickson, for example, which mentions wireless communications) comprises a spread spectrum communication link (note that spread spectrum is considered a functional equivalent to blue tooth, cell phone network, etc., as these are standard wireless systems);

As described in Claims 30, 32 and 45;

ai. the POS network controller comprises a radio frequency identification system (RFID) controller (see col. 8, lines 38-45);

As described in Claim 43;

aj. the fuel dispensing component comprises at least one of a price/volume display (96), a stop button, an emergency stop button, a

select-to-start button (102), a push-to-start button (102), a nozzle boot microswitch, a valve, a vapor recovery system , and an automatic refueling robot (see col. 11, lines 44-50);

As described in Claim 46;

ak. the customer identification device comprises at least one of a bezel reader, a card reader (92), a smart card transceiver, a tag transceiver (see col. 8, lines 38-45), a nozzle antenna reader, a handheld reader, and a vehicle on board system;

Both Kolls and Dickson et al are considered analogous art since they concern use of the internet for networking of fuel dispensers in a vehicle fueling environment.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have provided the refueling tank level means, wireless communication link, RFID controller, price/volume display (for example), or tag transceiver of Dickson et al to the system of Kolls.

The suggestion/motivation would have been to provide a secure and efficient means of interface with customers. See abstracts of Dickson et al and Kolls.

Therefore, it would have been obvious to obtain the invention as described in Claims 6, 8, 16, 23, 30, 32, 36, 43, 45, 46 and 49-56.

***Response to Arguments***

4. Applicant's arguments filed 9/29/04 have been fully considered but they are not persuasive. Applicant's arguments with respect to Claims 1-56 have been considered but are moot in view of the new ground(s) of rejection. As described above, the limitations of a first and second wireless link are met by the combination of Kolls and Meier. Kolls discloses using a wireless system and Meier discloses details of such a system using base stations which act as secondary wireless communication links. Therefore, Claims 1-56 are rejected.

***Conclusion***

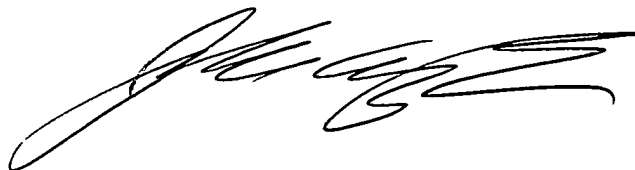
5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (703)308-3423. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (703)306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey A. Shapiro  
Examiner  
Art Unit 3653

December 10, 2004



DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600